

NOTES:

- STREET, WATERWAY AND TOWNSHIP BOUNDARY LOCATIONS, UNLESS OTHERWISE NOTED, FROM MASSACHUSETTS GIS AND CITY OF WOBURN ENGINEERING DEPT.
- ALL SAMPLE LOCATIONS OBTAINED BY GPS UNLESS OTHERWISE NOTED.
- FOSTER WHEELER SEDIMENT SAMPLES OF THE "02" & "03" SERIES (I.E. SD-17-02FW) LOCATIONS APPROXIMATED BASED ON MEASUREMENTS CONTAINED IN FIELD NOTES.
- WELL G & H LOCATIONS (IF SHOWN) OBTAINED FROM A PLAN BY GEOTRANS, INC. ENTITLED: "DATA LOCATION MAP, G & H SITE", PLATE 2-1, DATED: 11/15/93, REVISED: 9/25/96, ORIGINAL SCALE: 1"=200', DATUM OF PLAN: NAD 27 FEET.
- HIDE PILE LOCATIONS FROM A PLAN BY MERIDIAN LAND SERVICES, INC., ENTITLED: "PROJECT RECORD, EAST SIDE UNDEVELOPED PROPERTIES, REMEDIATED AREAS, INDUSTRI-PLEX SITE REMEDIAL TRUST, WOBURN, MASSACHUSETTS", DATED: MARCH 2, 2001, C-6.
- PLAN COORDINATES IN NAD 83 FEET.
- ALL LOCATIONS CONVERTED FROM ORIGINAL DATUM TO NAD 83 FEET USING BLUE MARBLE GEOGRAPHIC CALCULATOR SOFTWARE (VERSION 4.2).
- PLAN NOT TO BE USED FOR DESIGN.
- ALL LOCATIONS TO BE CONSIDERED APPROXIMATE.
- THE WATERWAY BOUNDARIES SHOWN MAY NOT REPRESENT THE LIMITS OF THE WATERWAYS AT THE TIME OF SAMPLING DUE TO SEASONAL VARIATIONS IN WATERWAY BOUNDARIES AND POTENTIAL ERRORS IN WATERWAY MAPPING.

Location	Fe	Mn	Tl
HB02-07			
HB02-11			

Red boxes indicate metals that exceed all applicable criteria

Metals Abbreviations
Fe Iron
Cd Cadmium
Mn Manganese
Pb Lead
Tl Thallium
V Vanadium
Hg Mercury
Sb Antimony
Cu Copper

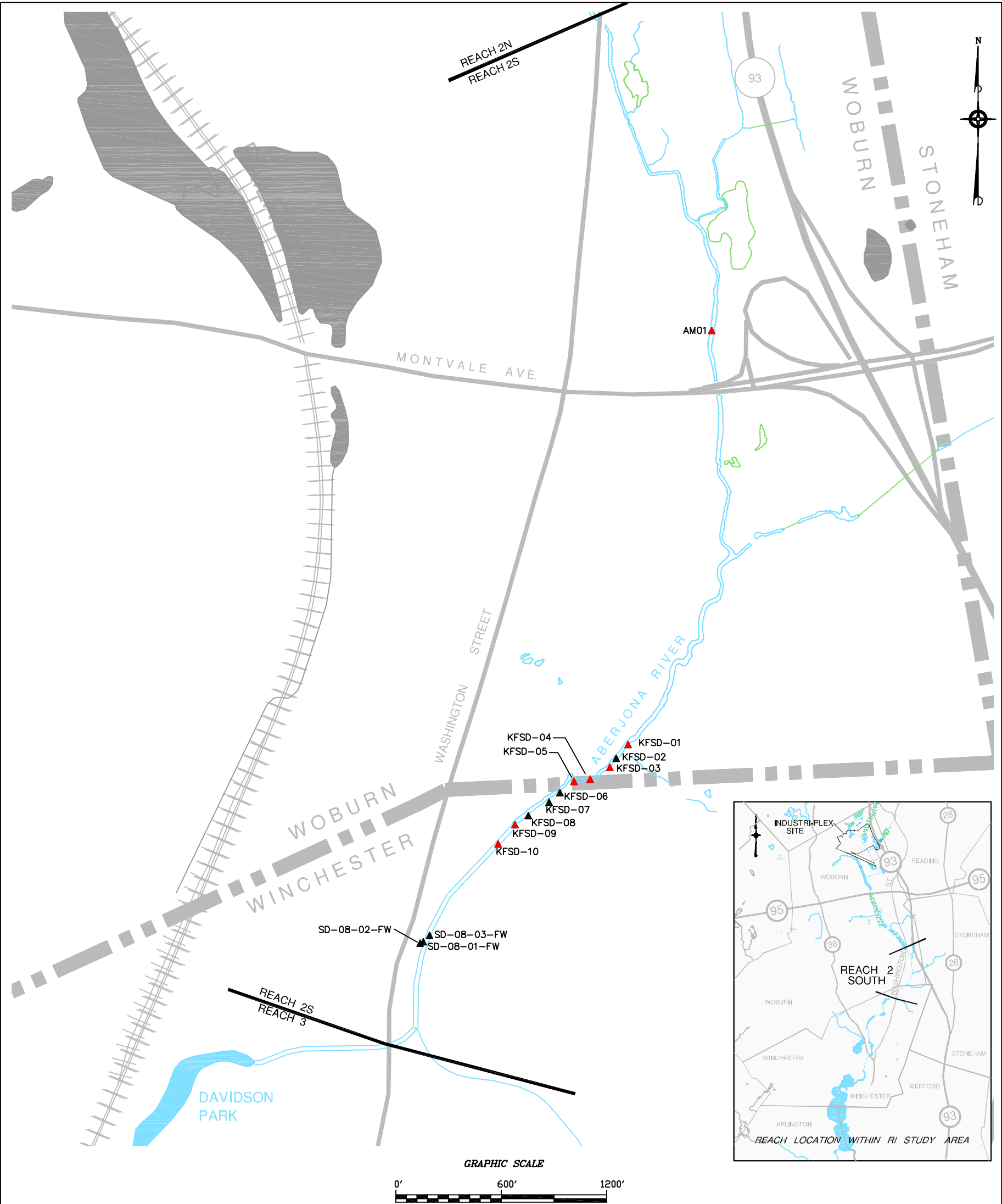
FIGURE 4-4f

SURFACE SEDIMENT CRITERIA EXCEEDANCE – OTHER METALS – REACH 2N			
MSGRP REMEDIAL INVESTIGATION REPORT			
INDUSTRI-PLEX SITE, WOBURN, MASSACHUSETTS			
DRAWN BY:	D.W. MACDOUGALL	REV.:	0
CHECKED BY:	D. BAXTER	DATE:	MARCH 11, 2005
SCALE:	AS SHOWN	FILE NO.:	DWG\4123\0910\OTHERMETALS_REACH_2N_SD.DWG



TETRA TECH NUS, INC.

55 Jonspin Road Wilmington, MA 01887
(978)658-7899




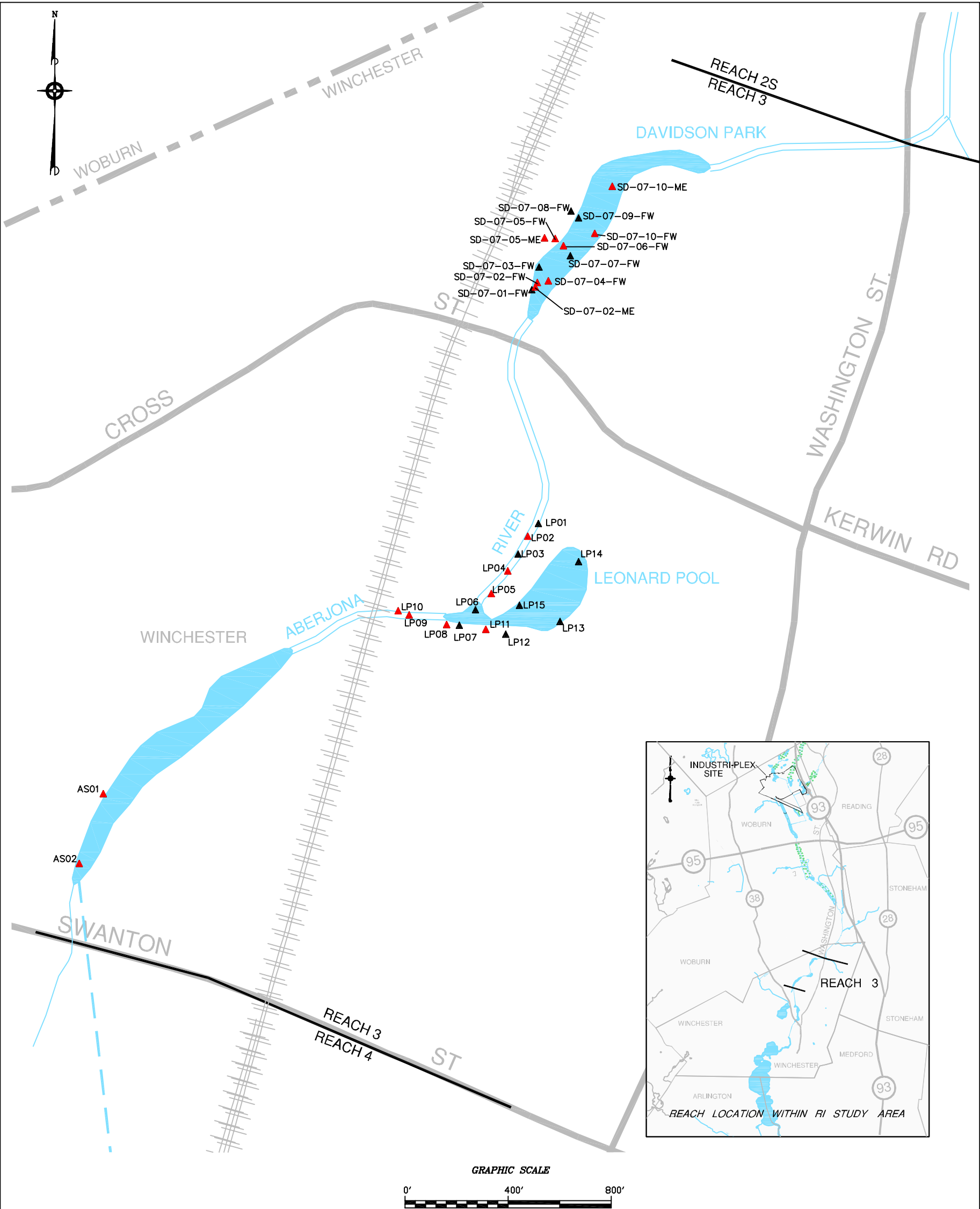
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LEGEND

- ▲ SURFACE SEDIMENT SAMPLE LOCATION WHERE ALL APPLICABLE CRITERIA ARE EXCEEDED FOR ARSENIC. REFERENCE CRITERIA:
 - EPA REGION 9 PRG (2004) = 0.39 mg/kg
 - OMEE SEL (1993) = 33 mg/kg
 - STUDY AREA AVG. BACKGROUND CONC. = 16.7 mg/kg
- ▲ SAMPLE ANALYZED FOR METALS, BUT ARSENIC CONCENTRATION DOES NOT EXCEED ALL APPLICABLE CRITERIA
- WETLANDS AREA
- ABERJONA RIVER OR OTHER OPEN STREAM
- CULVERTED RIVER SECTION
- PONDED WATER AREA
- REACH BOUNDARY

SURFACE SEDIMENT CRITERIA EXCEEDANCE – ARSENIC – REACH 2S			FIGURE 4–4g			
MSGRP REMEDIAL INVESTIGATION REPORT			<div><div></div><div>TETRA TECH NUS, INC.</div></div> <div>55 Jonspin RoadWilmington, MA 01887(978)658–7899</div>			
INDUSTRI-PLEX SITE, WOBURN, MASSACHUSETTS						
DRAWN BY:	D.W. MACDOUGALL	REV.:				0
CHECKED BY:	D. BAXTER	DATE:				MARCH 11, 2005
SCALE:	AS SHOWN	FILE NO.:				\\DWG\4123\0910\ARSENIC_REACH_2S_SD.DWG



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- ABERJONA RIVER OR OTHER OPEN STREAM
- CULVERTED RIVER SECTION
- PONDED WATER AREA
- REACH BOUNDARY

SURFACE SEDIMENT CRITERIA EXCEEDANCE – ARSENIC – REACH 3

MSGRP REMEDIAL INVESTIGATION REPORT

INDUSTRI-PLEX SITE, WOBURN, MASSACHUSETTS

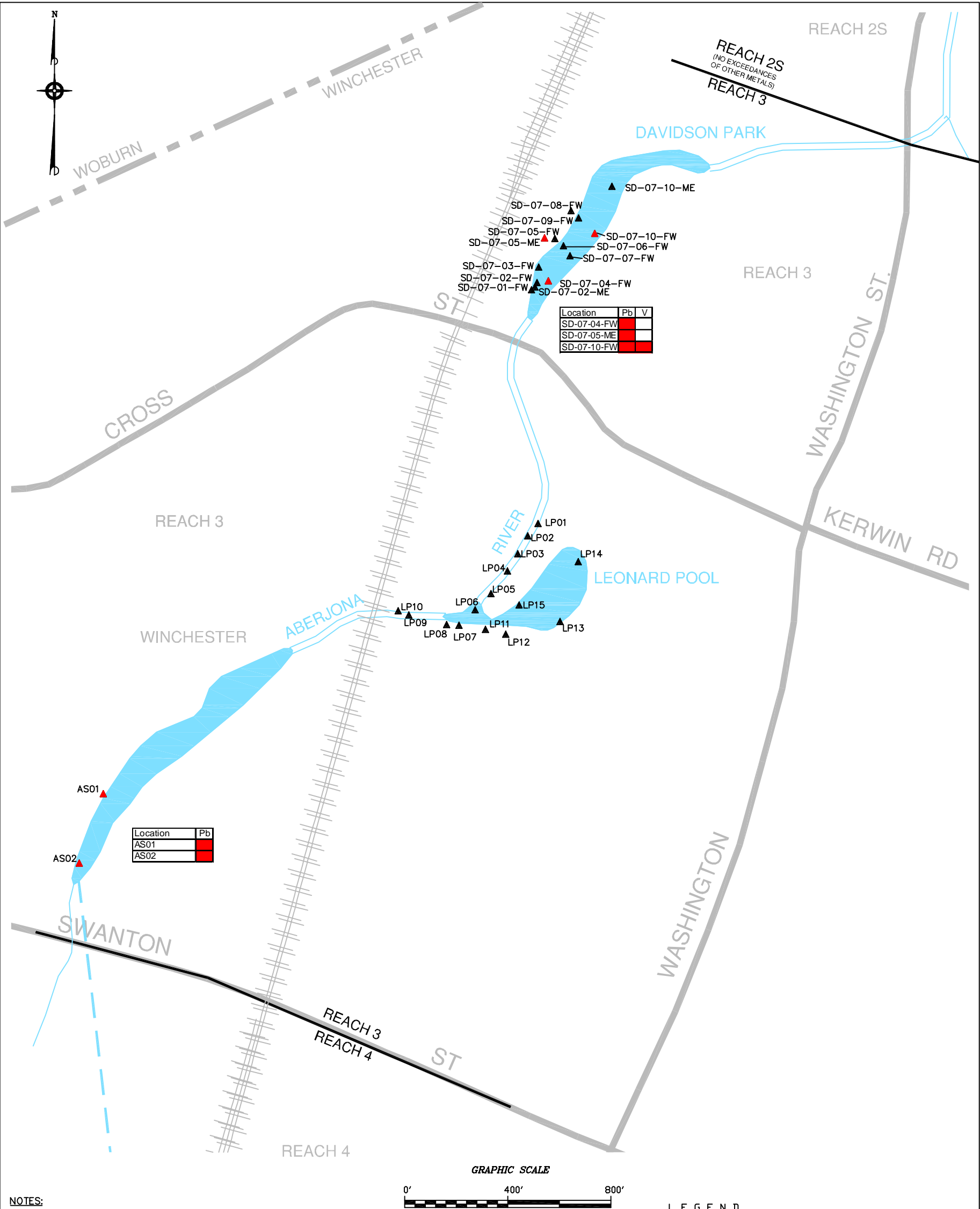
DRAWN BY:	D.W. MACDOUGALL	REV.:	0
CHECKED BY:	D. BAXTER	DATE:	MARCH 11, 2005
SCALE:	AS SHOWN	FILE NO.:	DWG\4123\0910\ARSENIC_REACH_3_SD.DWG

FIGURE 4-4h



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8. PLAN NOT TO BE USED FOR DESIGN.
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10. THE WATERWAY BOUNDARIES SHOWN MAY NOT REPRESENT THE LIMITS OF THE WATERWAYS AT THE TIME OF SAMPLING DUE TO SEASONAL VARIATIONS IN WATERWAY BOUNDARIES AND POTENTIAL ERRORS IN WATERWAY MAPPING.

Location	Fe	Mn	Ti
HB02-07			
HB02-11			

Red boxes indicate metals that exceed all applicable criteria

Metals
Abbreviations
Fe Iron
Cd Cadmium
Mn Manganese
Pb Lead
Tl Thallium
V Vanadium
Hg Mercury
Sb Antimony
Cu Copper

LEGEND

- SURFACE SEDIMENT SAMPLE LOCATION WHERE ALL APPLICABLE CRITERIA ARE EXCEEDED FOR ANY METAL OTHER THAN ARSENIC. REFERENCE CRITERIA:
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- SURFACE SEDIMENT SAMPLE LOCATION WHERE SAMPLE ANALYZED FOR METALS, BUT NONE EXCEEDED ALL APPLICABLE CRITERIA.
- WETLANDS AREA
- ABERJONA RIVER OR OTHER OPEN STREAM
- CULVERTED RIVER SECTION
- PONDED WATER AREA
- REACH BOUNDARY

SURFACE SEDIMENT CRITERIA EXCEEDANCE – OTHER METALS – REACH 3

FIGURE 4-4i

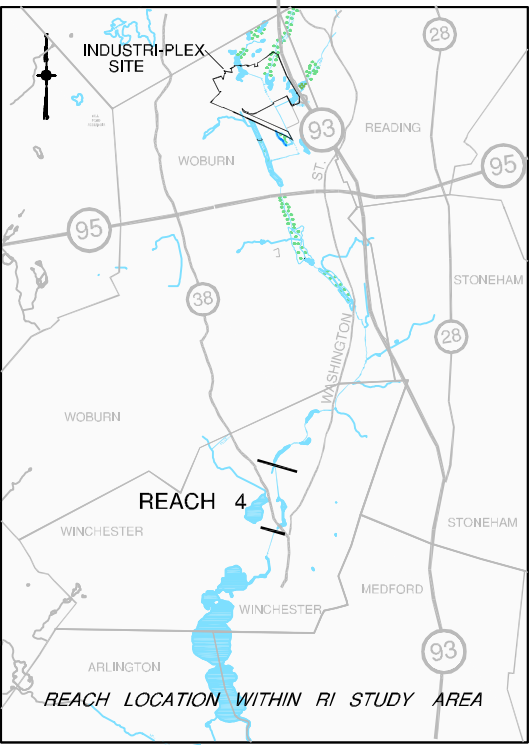
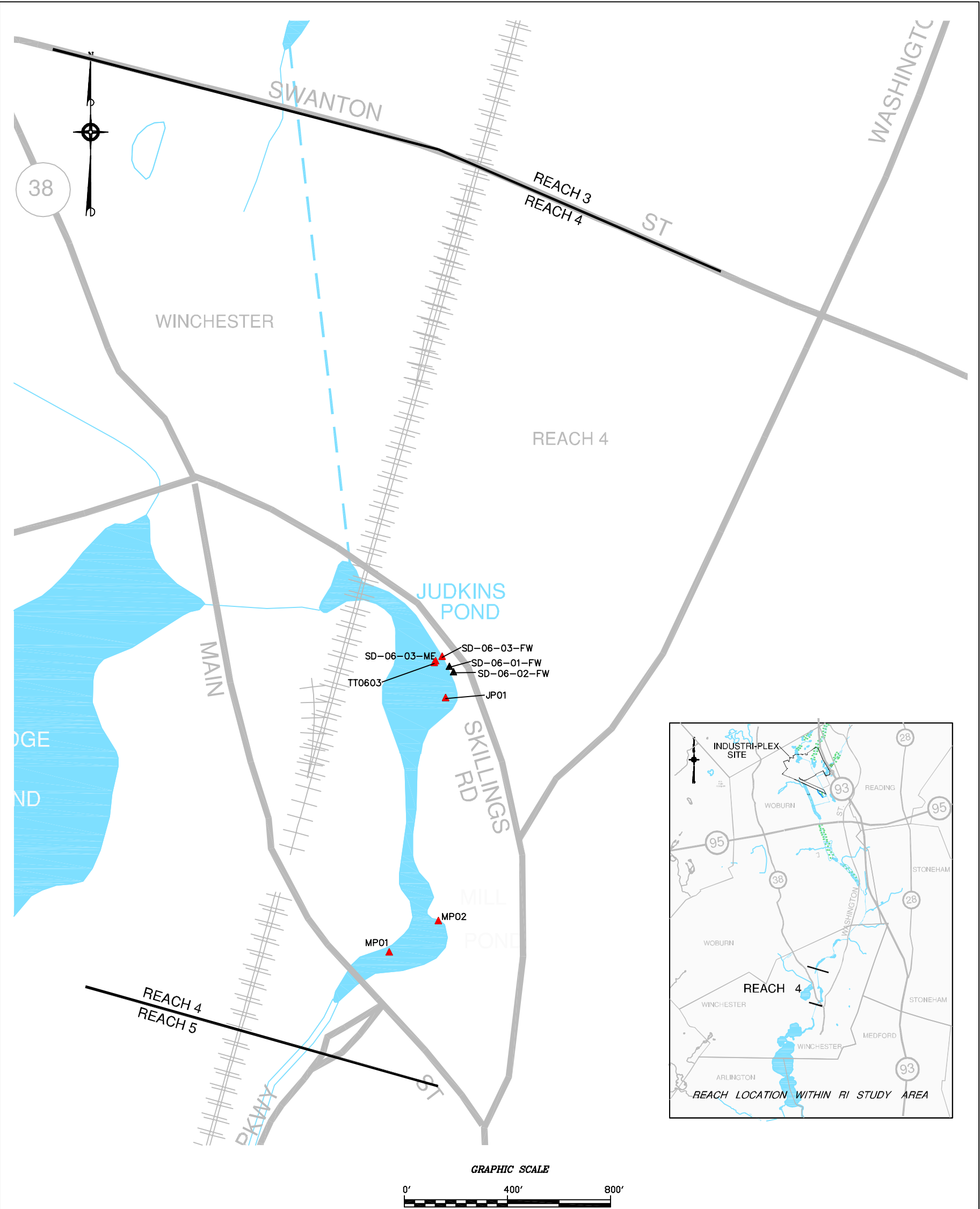
MSGRP REMEDIAL INVESTIGATION REPORT
INDUSTRI-PLEX SITE, WOBURN, MASSACHUSETTS

DRAWN BY:	D.W. MACDOUGALL	REV.:	0
CHECKED BY:	D. BAXTER	DATE:	MARCH 11, 2005
SCALE:	AS SHOWN	FILE NO.:	:\DWG\4123\0910\OTHERMETALS_REACH_3_SD.DWG



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LEGEND

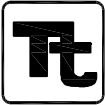
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- CULVERTED RIVER SECTION
- PONDED WATER AREA
- REACH BOUNDARY

SURFACE SEDIMENT CRITERIA EXCEEDANCE – ARSENIC – REACH 4

FIGURE 4-4j

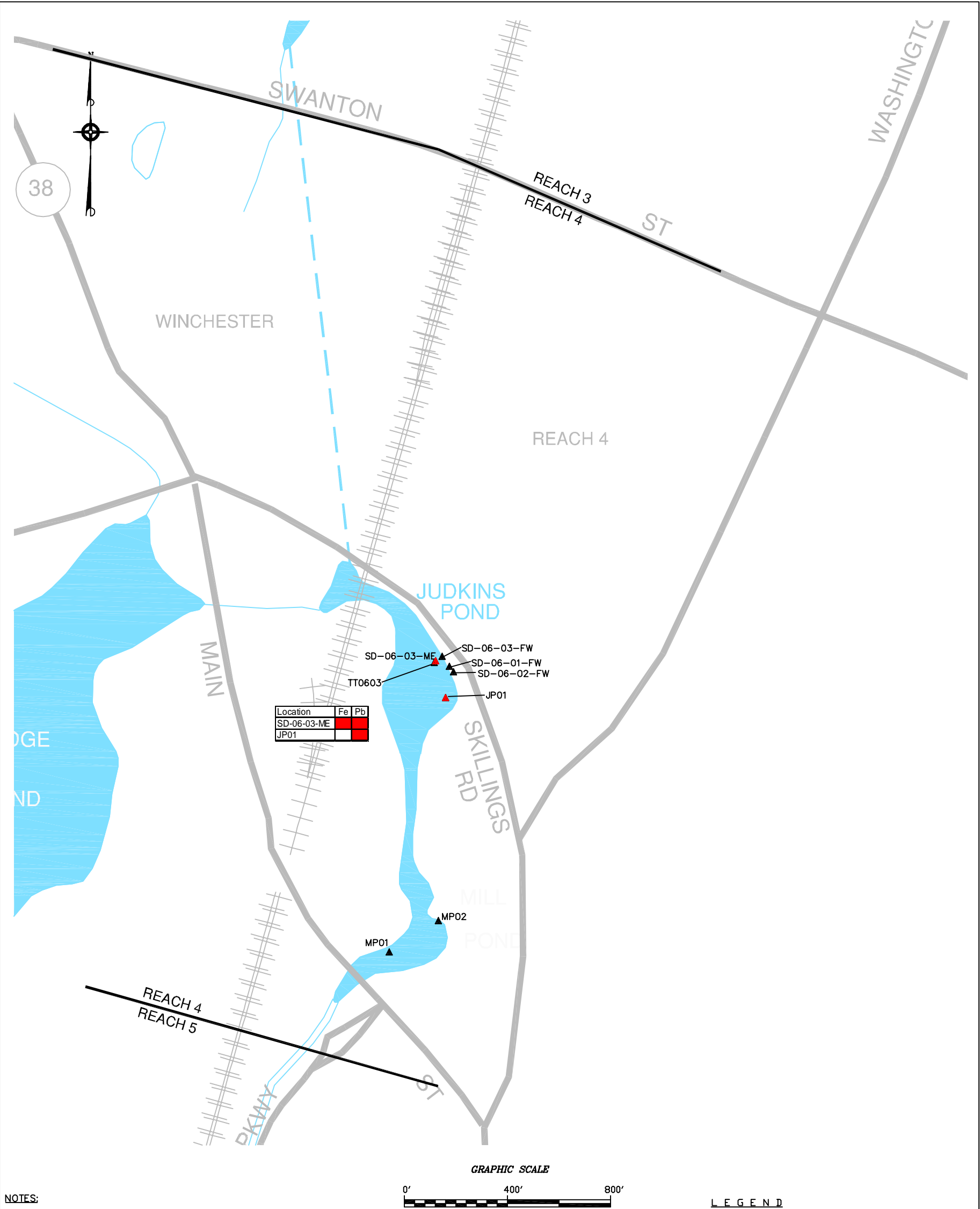
MSGRP REMEDIAL INVESTIGATION REPORT
INDUSTRI-PLEX SITE, WOBURN, MASSACHUSETTS

DRAWN BY:	D.W. MACDOUGALL	REV.:	0
CHECKED BY:	D. BAXTER	DATE:	MARCH 11, 2005
SCALE:	AS SHOWN	FILE NO.:	\\DWG\4123\0910\ARSENIC_REACH_4_SD.DWG



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Location	Fe	Mn	Ti
HB02-07			
HB02-11			

Red boxes indicate metals that exceed all applicable criteria

Metals Abbreviations	
Fe	Iron
Cd	Cadmium
Mn	Manganese
Pb	Lead
Tl	Thallium
V	Vanadium
Hg	Mercury
Sb	Antimony
Cu	Copper

LEGEND

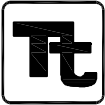
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- WETLANDS AREA
- ABERJONA RIVER OR OTHER OPEN STREAM
- CULVERTED RIVER SECTION
- PONDED WATER AREA
- REACH BOUNDARY

SURFACE SEDIMENT CRITERIA EXCEEDANCE – OTHER METALS – REACH 4

FIGURE 4-4k

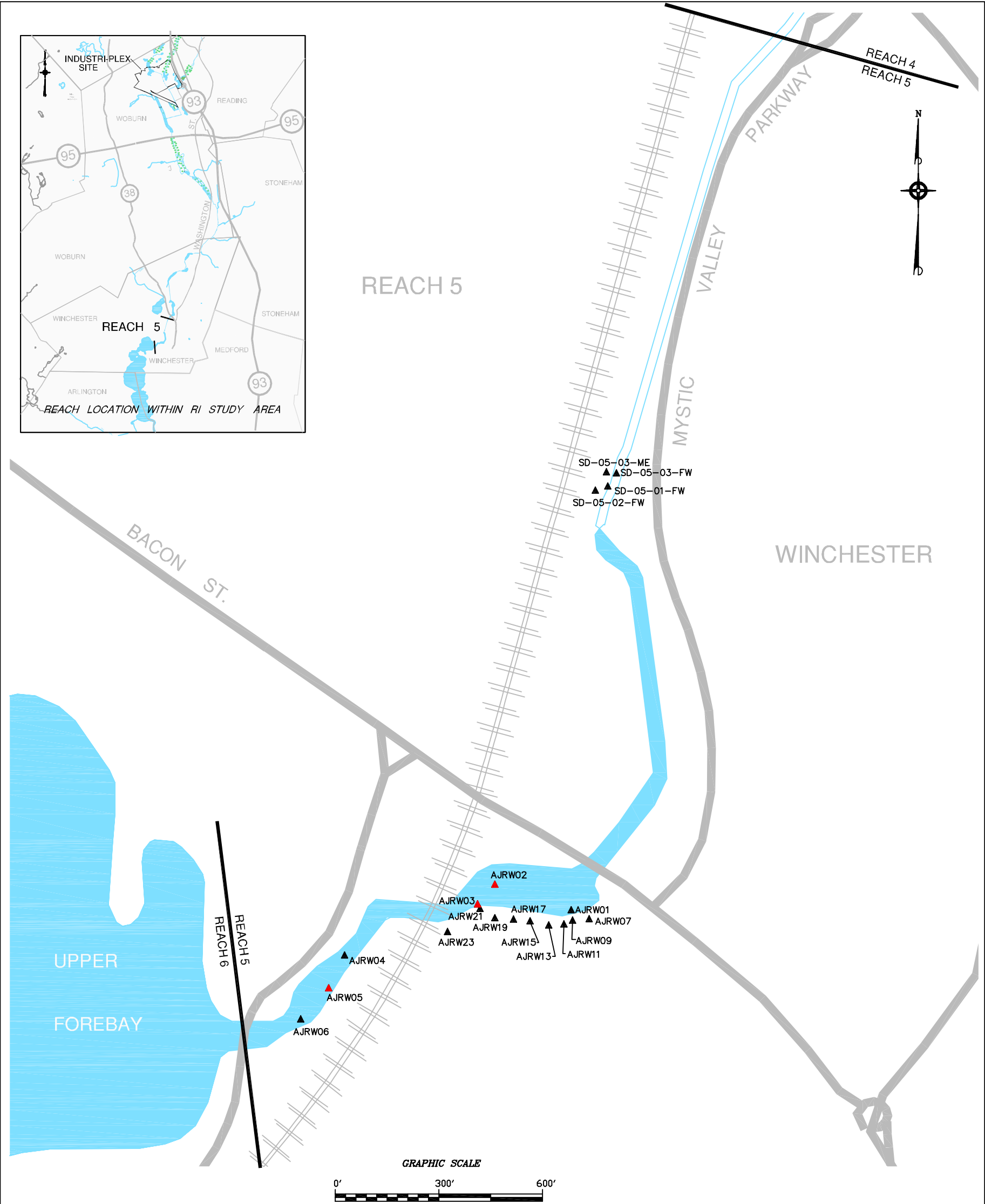
MSGRP REMEDIAL INVESTIGATION REPORT
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- PONDED WATER AREA
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SURFACE SEDIMENT CRITERIA EXCEEDANCE – ARSENIC – REACH 5

FIGURE 4-4I

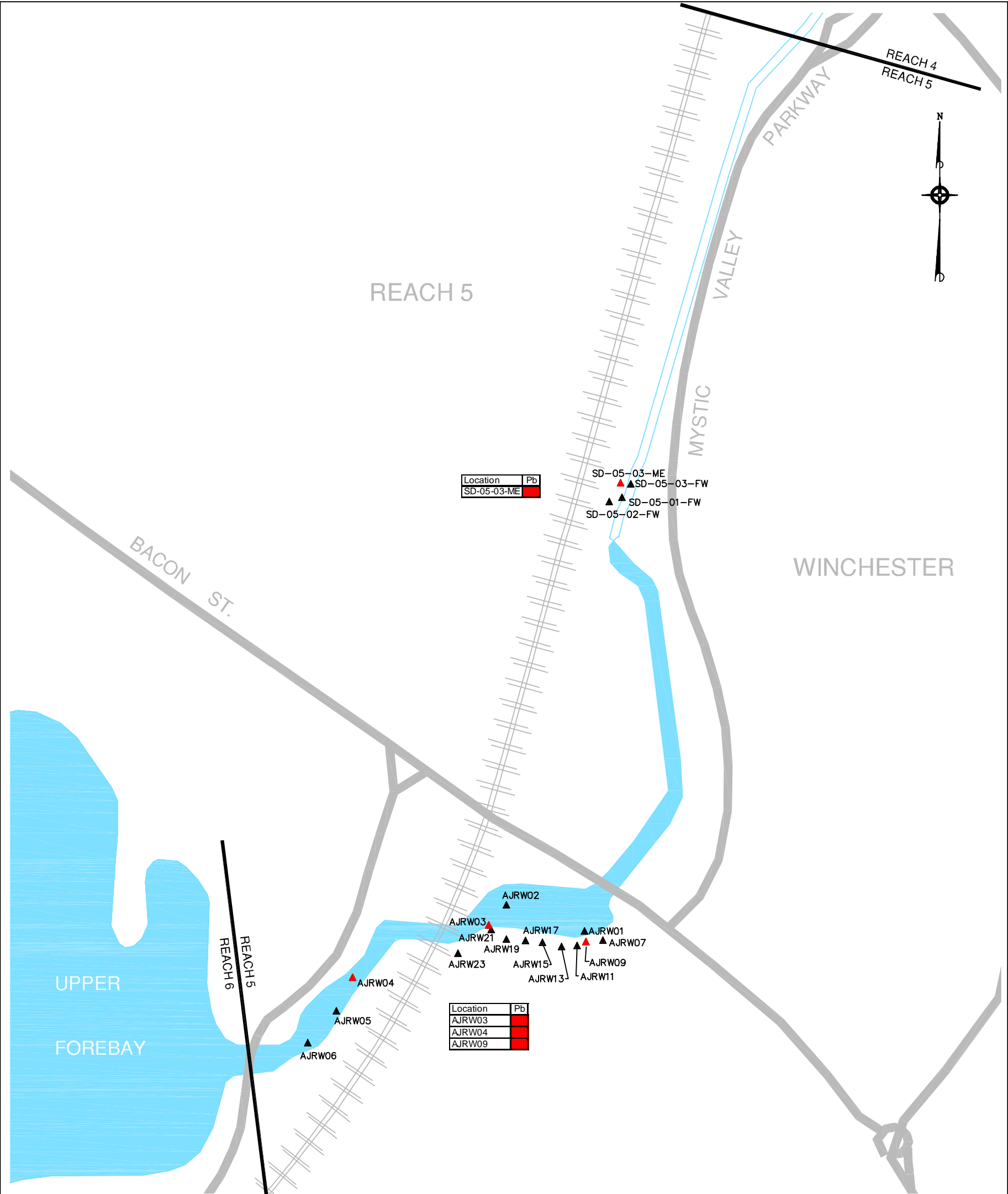
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DRAWN BY:	D.W. MACDOUGALL	REV.:	0
CHECKED BY:	D. BAXTER	DATE:	MARCH 11, 2005
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Location	Pb
AJRW03	
AJRW04	
AJRW09	

Red boxes indicate metals that exceed all applicable criteria

Location	Fe	Mn	Tl
HB02-07			
HB02-11			

Metals	Abbreviations
Fe	Iron
Cd	Cadmium
Mn	Manganese
Pb	Lead
Tl	Thallium
V	Vanadium
Hg	Mercury
Sb	Antimony
Cu	Copper

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- CULVERTED RIVER SECTION
- PONDED WATER AREA
- REACH BOUNDARY

SURFACE SEDIMENT CRITERIA EXCEEDANCE – OTHER METALS – REACH 5

MSGRP REMEDIAL INVESTIGATION REPORT

INDUSTRI- PLEX SITE, WOBURN, MASSACHUSETTS

DRAWN BY: D.W. MACDOUGALL

CHECKED BY: D. BAXTER

SCALE: AS SHOWN

REV.: 0

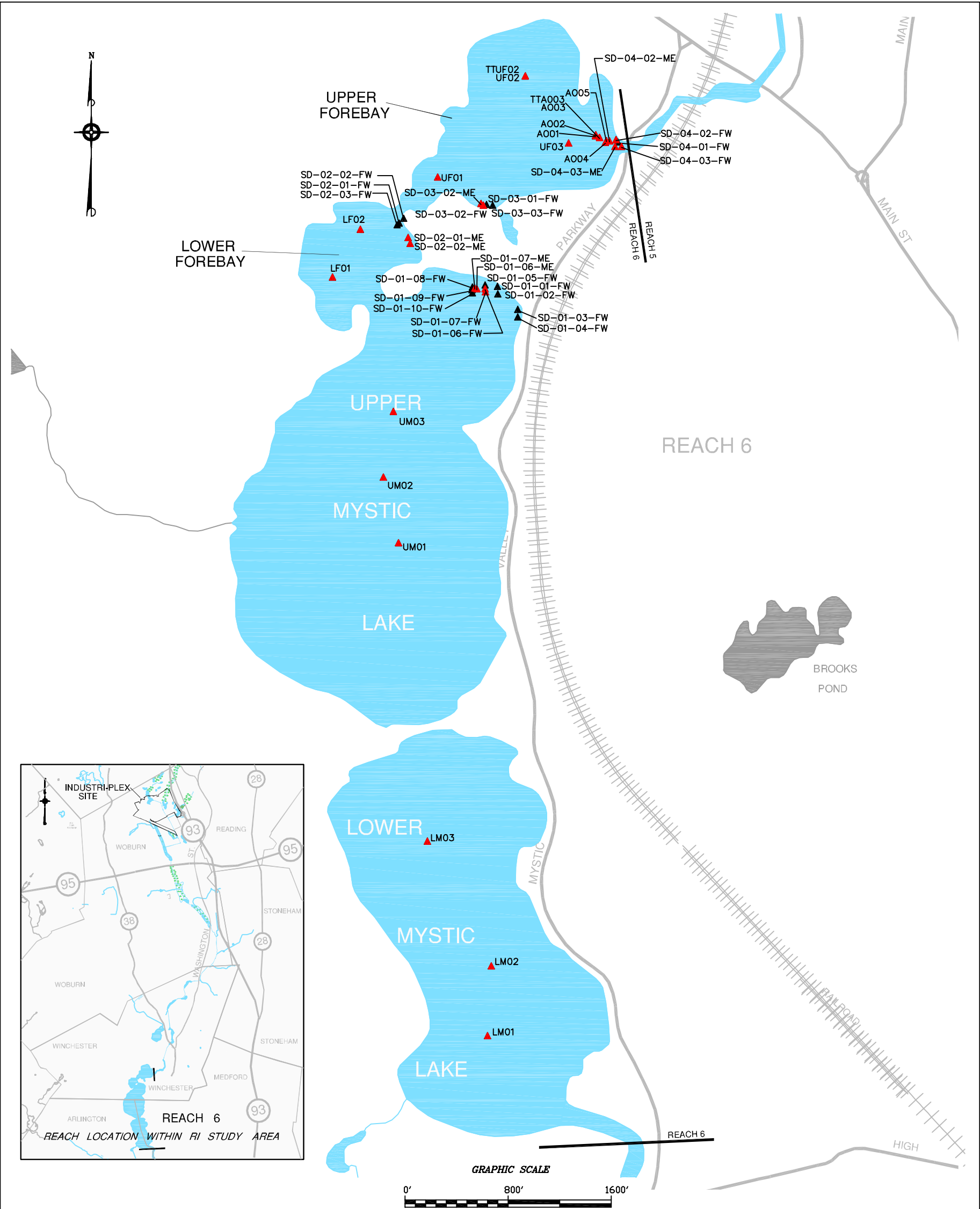
DATE: MARCH 11, 2005

FILE NO.: DWG\4123\0910\OTHERMETALS_REACH_5_SD.DWG

FIGURE 4-4m

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1. STREET, WATERWAY AND TOWNSHIP BOUNDARY LOCATIONS, UNLESS OTHERWISE NOTED, FROM MASSACHUSETTS GIS AND CITY OF WOBURN ENGINEERING DEPT.
2. ALL SAMPLE LOCATIONS OBTAINED BY GPS UNLESS OTHERWISE NOTED.
3. FOSTER WHEELER SEDIMENT SAMPLES OF THE "02" & "03" SERIES (I.E. SD-17-02FW) LOCATIONS APPROXIMATED BASED ON MEASUREMENTS CONTAINED IN FIELD NOTES.
4. WELL G & H LOCATIONS (IF SHOWN) OBTAINED FROM A PLAN BY GEOTRANS, INC., ENTITLED: "DATA LOCATION MAP, G & H SITE", PLATE 2-1, DATED: 11/15/93, REVISED: 9/25/96, ORIGINAL SCALE: 1"=200', DATUM OF PLAN: NAD 27 FEET.
5. HIDE PILE LOCATIONS FROM A PLAN BY MERIDIAN LAND SERVICES, INC., ENTITLED: "PROJECT RECORD, EAST SIDE UNDEVELOPED PROPERTIES, REMEDIATED AREAS, INDUSTRI-PLEX SITE REMEDIAL TRUST, WOBURN, MASSACHUSETTS", DATED: MARCH 2, 2001, C-6.
6. PLAN COORDINATES IN NAD 83 FEET.
7. ALL LOCATIONS CONVERTED FROM ORIGINAL DATUM TO NAD 83 FEET USING BLUE MARBLE GEOGRAPHIC CALCULATOR SOFTWARE (VERSION 4.2).
8. PLAN NOT TO BE USED FOR DESIGN.
9. ALL LOCATIONS TO BE CONSIDERED APPROXIMATE.
10. THE WATERWAY BOUNDARIES SHOWN MAY NOT REPRESENT THE LIMITS OF THE WATERWAYS AT THE TIME OF SAMPLING DUE TO SEASONAL VARIATIONS IN WATERWAY BOUNDARIES AND POTENTIAL ERRORS IN WATERWAY MAPPING.

LEGEND

- SURFACE SEDIMENT SAMPLE LOCATION WHERE ALL APPLICABLE CRITERIA ARE EXCEEDED FOR ARSENIC. REFERENCE CRITERIA:
 - EPA REGION 9 PRG (2004) = 0.39 mg/kg
 - OMEE SEL (1993) = 33 mg/kg
 - STUDY AREA AVG. BACKGROUND CONC. = 16.7 mg/kg
- SAMPLE ANALYZED FOR METALS, BUT ARSENIC CONCENTRATION DOES NOT EXCEED ALL APPLICABLE CRITERIA
- WETLANDS AREA
- ABERJONA RIVER OR OTHER OPEN STREAM
- CULVERTED RIVER SECTION
- PONDED WATER AREA
- REACH BOUNDARY

SURFACE SEDIMENT CRITERIA EXCEEDANCE – ARSENIC – REACH 6

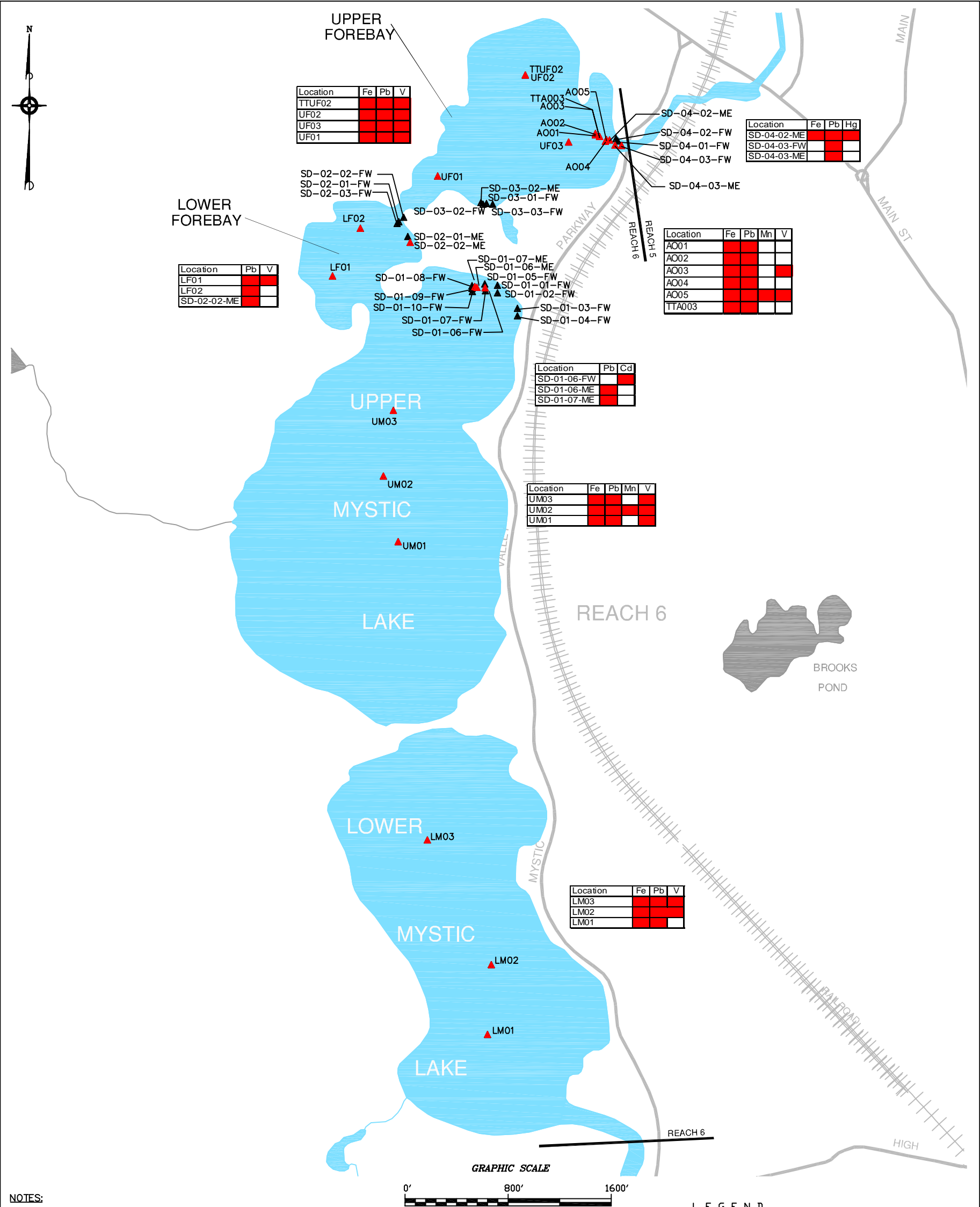
FIGURE 4-4n

MSGRP REMEDIAL INVESTIGATION REPORT			
INDUSTRI-PLEX SITE. WOBURN, MASSACHUSETTS			
DRAWN BY:	D.W. MACDOUGALL	REV.:	0
CHECKED BY:	D. BAXTER	DATE:	MARCH 11, 2005
SCALE:	AS SHOWN	FILE NO.:	DWG\4123\0910\ARSENIC_REACH_6_SD.DWG



TETRA TECH NUS, INC.

55 Jonspin Road
Wilmington, MA 01887
(978)658-7899



NOTES:

1. STREET, WATERWAY AND TOWNSHIP BOUNDARY LOCATIONS, UNLESS OTHERWISE NOTED, FROM MASSACHUSETTS GIS AND CITY OF WOBURN ENGINEERING DEPT.
2. ALL SAMPLE LOCATIONS OBTAINED BY GPS UNLESS OTHERWISE NOTED.
3. FOSTER WHEELER SEDIMENT SAMPLES OF THE "02" & "03" SERIES (I.E. SD-17-02FW)LOCATIONS APPROXIMATED BASED ON MEASUREMENTS CONTAINED IN FIELD NOTES.
4. WELL G & H LOCATIONS (IF SHOWN) OBTAINED FROM A PLAN BY GEOTRANS, INC. ENTITLED:"DATA LOCATION MAP, G & H SITE", PLATE 2-1, DATED: 11/15/93, REVISED: 9/25/96, ORIGINAL SCALE: 1"=200', DATUM OF PLAN: NAD 27 FEET.
5. HIDE PILE LOCATIONS FROM A PLAN BY MERIDIAN LAND SERVICES, INC., ENTITLED:"PROJECT RECORD, EAST SIDE UNDEVELOPED PROPERTIES, REMEDIATED AREAS, INDUSTRI- PLEX SITE REMEDIAL TRUST, WOBURN, MASSACHUSETTS", DATED: MARCH 2, 2001, C-6.
6. PLAN COORDINATES IN NAD 83 FEET.
7. ALL LOCATIONS CONVERTED FROM ORIGINAL DATUM TO NAD 83 FEET USING BLUE MARBLE GEOGRAPHIC CALCULATOR SOFTWARE (VERSION 4.2).
8. PLAN NOT TO BE USED FOR DESIGN.
9. ALL LOCATIONS TO BE CONSIDERED APPROXIMATE.
10. THE WATERWAY BOUNDARIES SHOWN MAY NOT REPRESENT THE LIMITS OF THE WATERWAYS AT THE TIME OF SAMPLING DUE TO SEASONAL VARIATIONS IN WATERWAY BOUNDARIES AND POTENTIAL ERRORS IN WATERWAY MAPPING.

Location	Fe	Mn	Tl
HB02-07			
HB02-11			

Red boxes indicate metals that exceed all applicable criteria

Metals	Abbreviations
Fe	Iron
Cd	Cadmium
Mn	Manganese
Pb	Lead
Tl	Thallium
V	Vanadium
Hg	Mercury
Sb	Antimony
Cu	Copper

LEGEND

- SURFACE SEDIMENT SAMPLE LOCATION WHERE ALL APPLICABLE CRITERIA ARE EXCEEDED FOR ANY METAL OTHER THAN ARSENIC. REFERENCE CRITERIA:
 - EPA REGION 9 PRG (2004)
 - OMEE SEL (1993)
 - STUDY AREA AVG. BACKGROUND CONC.SEE TABLE 4-4b FOR APPLICABLE CRITERIA FOR INDIVIDUAL METALS.
- SURFACE SEDIMENT SAMPLE LOCATION WHERE SAMPLE ANALYZED FOR METALS, BUT NONE EXCEEDED ALL APPLICABLE CRITERIA.
- WETLANDS AREA
- ABERJONA RIVER OR OTHER OPEN STREAM
- CULVERTED RIVER SECTION
- PONDED WATER AREA
- REACH BOUNDARY

SURFACE SEDIMENT CRITERIA EXCEEDANCE – OTHER METALS – REACH 6

FIGURE 4-4o

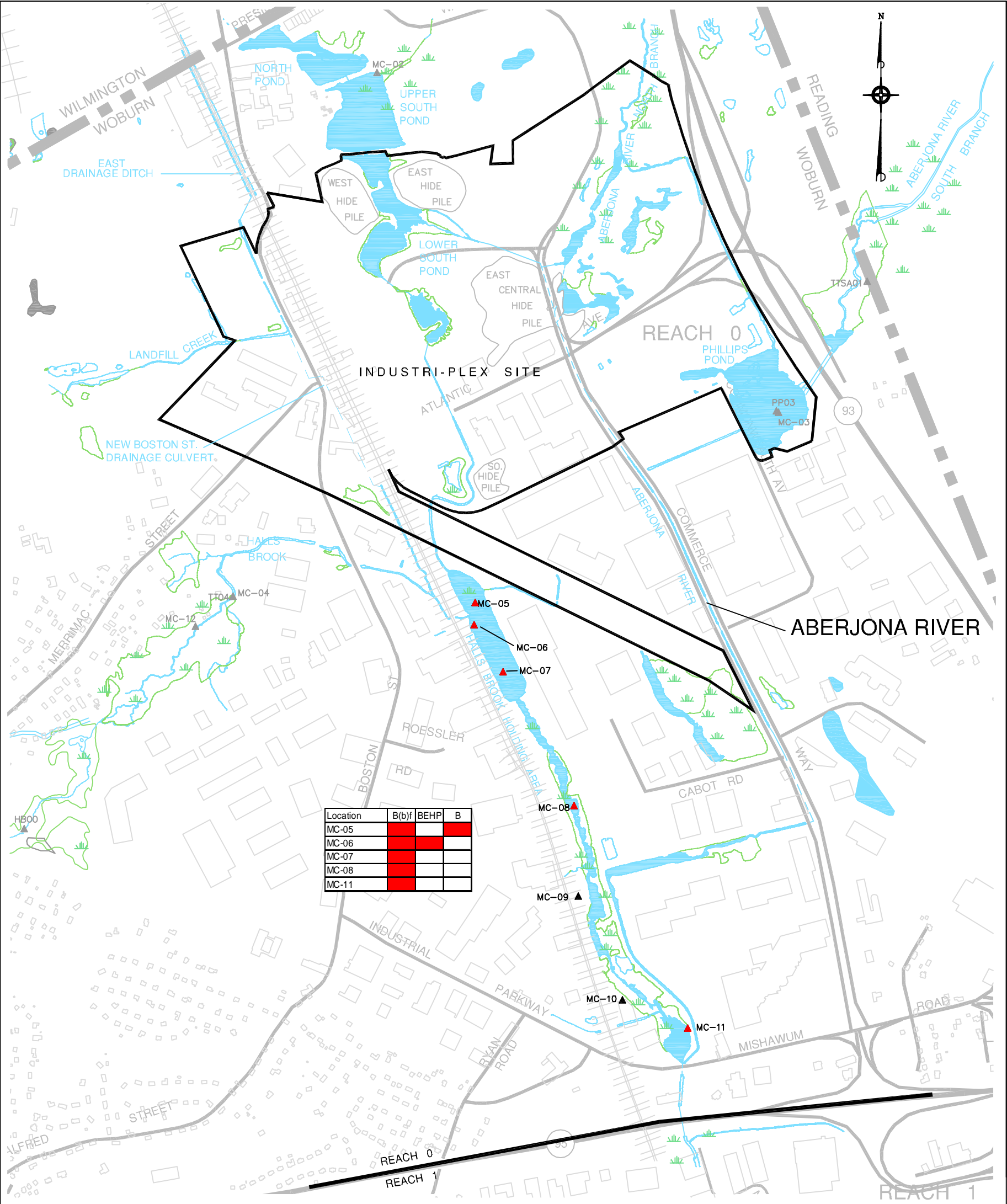
MSGRP REMEDIAL INVESTIGATION REPORT
INDUSTRI- PLEX SITE. WOBURN, MASSACHUSETTS

DRAWN BY:	D.W. MACDOUGALL	REV.:	0
CHECKED BY:	D. BAXTER	DATE:	MARCH 11, 2005
SCALE:	AS SHOWN	FILE NO.:	DWG\4123\0910\OTHERMETALS_REACH_6-SD.DWG



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NOTES:

- 1. STREET, WATERWAY AND TOWNSHIP BOUNDARY LOCATIONS, UNLESS OTHERWISE NOTED, FROM MASSACHUSETTS GIS AND CITY OF WOBURN ENGINEERING DEPT.
- 2. ALL SAMPLE LOCATIONS OBTAINED BY GPS UNLESS OTHERWISE NOTED.
- 3. FOSTER WHEELER SEDIMENT SAMPLES OF THE "02" & "03" SERIES (I.E. SD-17-02FW) LOCATIONS APPROXIMATED BASED ON MEASUREMENTS CONTAINED IN FIELD NOTES.
- 4. WELL G & H LOCATIONS (IF SHOWN) OBTAINED FROM A PLAN BY GEOTRANS, INC. ENTITLED:"DATA LOCATION MAP, G & H SITE", PLATE 2-1, DATED: 11/15/93, REVISED: 9/25/96, ORIGINAL SCALE: 1"=200', DATUM OF PLAN: NAD 27 FEET.
- 5. HIDE PILE LOCATIONS FROM A PLAN BY MERIDIAN LAND SERVICES, INC., ENTITLED:"PROJECT RECORD, EAST SIDE UNDEVELOPED PROPERTIES, REMEDIATED AREAS, INDUSTRI-PLEX SITE REMEDIAL TRUST, WOBURN, MASSACHUSETTS", DATED: MARCH 2, 2001, C-6.
- 6. PLAN COORDINATES IN NAD 83 FEET.
- 7. ALL LOCATIONS CONVERTED FROM ORIGINAL DATUM TO NAD 83 FEET USING BLUE MARBLE GEOGRAPHIC CALCULATOR SOFTWARE (VERSION 4.2).
- 8. PLAN NOT TO BE USED FOR DESIGN.
- 9. ALL LOCATIONS TO BE CONSIDERED APPROXIMATE.
- 10. THE WATERWAY BOUNDARIES SHOWN MAY NOT REPRESENT THE LIMITS OF THE WATERWAYS AT THE TIME OF SAMPLING DUE TO SEASONAL VARIATIONS IN WATERWAY BOUNDARIES AND POTENTIAL ERRORS IN WATERWAY MAPPING.

Location	B(b)f	BEHP	B
MC-05			
MC-06			

Red boxes indicate compounds that exceed all applicable criteria

Abbreviations for Organic Compounds	
B	Benzene
B(b)f	Benzo(b)fluoranthene
BEHP	bis(2-Ethylhexyl)phthalate
PCE	Tetrachloroethene
TCE	Trichloroethene
VC	Vinyl Chloride

LEGEND

- ▲ SURFACE SEDIMENT SAMPLE LOCATION WHERE ALL APPLICABLE CRITERIA ARE EXCEEDED FOR ANY ORGANIC COMPOUND. REFERENCE CRITERIA:
 - EPA REGION 9 PRG (2004)
 - OME SEL (1993)
 - STUDY AREA AVG. BACKGROUND CONC.SEE TABLE 4-4c FOR APPLICABLE CRITERIA FOR INDIVIDUAL ORGANICS.
- ▲ SURFACE SEDIMENT SAMPLE LOCATION WHERE SAMPLE ANALYZED FOR ORGANICS, BUT NONE EXCEEDED ALL APPLICABLE CRITERIA. MOST LOCATIONS ANALYZED FOR VOCs, SVOCs, AND PESTICIDES/PCBs. SEE TABLES 2-4 AND 2-5 FOR ANALYSES AT SPECIFIC LOCATIONS.
- ▲ REFERENCE SEDIMENT SAMPLE LOCATION
- WETLANDS AREA
- ABERJONA RIVER OR OTHER OPEN STREAM
- CULVERTED RIVER SECTION
- PONDED WATER AREA
- REACH BOUNDARY

SURFACE SEDIMENT CRITERIA EXCEEDANCE – ORGANIC COMPOUNDS – REACH 0

MSGRP REMEDIAL INVESTIGATION REPORT
INDUSTRI-PLEX SITE, WOBURN, MASSACHUSETTS

DRAWN BY:	D.W. MACDOUGALL	REV.:	0
CHECKED BY:	D. BAXTER	DATE:	MARCH 11, 2005
SCALE:	AS SHOWN	FILE NO.	DWG\4123\0910\ORGANICS_REACH_0_SD.DWG

FIGURE 4-4p



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